

# The Effect of Perceived Price, Delivery Quality and Perceive Value on Purchase Intentions Mediated by Consumer Satisfaction (Study on E-commerce In Indonesia During Covid 19 Pandemic)

Nuzul Inas Nabila<sup>1</sup>, Aida Sari<sup>2</sup>, Sipa Paujjiah<sup>3</sup>  
{nuzulinasnabilaa@gmail.com<sup>1</sup>,aida.fakultasekonomi@gmail.com<sup>2</sup>,sipapaujjiah2010@yahoo.com<sup>3</sup>}

Lampung University<sup>1</sup>, Lampung University<sup>2</sup>, Lampung University<sup>3</sup>

**Abstract.** The purpose of this research activity is to determine the effect of perceived price and delivery quality on repurchase intentions through perceived value and satisfaction as mediating variables in Indonesian e-commerce during the Covid-19 pandemic. The technique used in selecting and determining the sample is non-probability sampling. Sample 166 respondents who have made online purchases during the Covid-19 pandemic on e-commerce websites in Indonesia.

The data analysis in this study uses SEM PLS to measure the direct or indirect effect of price perception, Delivery of quality, the perceived value, and consumer satisfaction in forming repeat purchase intentions. The results show that perceived price and perceived value have a significant impact on satisfaction and delivery quality has no positive impact on satisfaction, but delivery quality increases when mediated by perceived value. Satisfaction also affects repurchase intention.

**Keywords:** The perceived price, delivery of quality, the perceived value, satisfaction, and repeat purchase intentions.

## Introduction

E-Commerce During the Covid-19 pandemic, about 90 percent of internet users in Indonesia have made online shopping transactions. Seeing the high number of e-commerce transactions during the pandemic, online businesses are encouraged to provide good service and attractive offers for consumers. Focusing on the number of consumers, the seller must also gain customer trust, thereby encouraging repurchase intention.

The definition of a repurchase intention is the method of shopping for products or services from the constant enterprise. [1]. The motive for repurchase is relies heavily on a unique shopping experience. Customers develop more repeat purchase intention when consumer found value useful and hedonistic and are satisfied with purchases from the same seller before. [2]. Buyers maximize worth whereas sellers attempt to maximize customer satisfaction. The results studies [3] found that repurchase intentions are directly and indirectly influenced by perceived value which includes perceived price and also product delivery quality. Price is what is sacrificed or made clear to get a product [4]. Target price is the product's actual price, while perceived price is "the seller's perceived price level (target price) above the consumer's reference price".[5]. A reasonable perceived price has a positive effect on customer satisfaction, the consumer is more interested in getting a reasonable price

perception, which means that a value is based on what customers want in a transaction [6].

According to [7] found that fast delivery of products, returns, and refunds are important for consumers. Consumer satisfaction in e-commerce is highly dependent on timely and reliable product delivery.

Refers [8] defines perceived value as a comparison between what consumers sacrifice (perceived sacrifices) and what consumers get (perceived benefits) when buying products or services. Consumer sacrifices also take various forms, such as money, time, and effort put into buying a product.

Consumer satisfaction is considered very important in measuring the success of a business because the goal of entrepreneurs, in general, is to satisfy the needs and desires of consumers. Consumers will feel satisfied when a product or service meets their expectations. Therefore, satisfaction can mediate consumers' repurchase intentions [9].

Based on the factors described, this research can be classified into two factors namely intrinsic and extrinsic factors. Various studies have been conducted on these factors, but there are still few studies that focus on the delivery quality, which is currently in the COVID19 pandemic situation that e-commerce entrepreneurs need to interact with each other. Compete and innovate to provide high value and satisfaction to consumers. Therefore, it is important to research perceived price and quality of delivery to increase perceived value and customer satisfaction, to form an intention to repurchase.

## **Literature review and hypothesis development**

**Perceived Price.** According to [10] suggests that the perception of the perceived price of the product in online purchases is that consumers believe in the quality of the products offered, based on the prices offered, the manufacturers make reasonable discounts on the prices of the offer products they market. compared to competitive prices, so consumers are satisfied with the price. The product and consumers will pay close attention to information from manufacturers about the price of the product to be purchased. Perceived pricing is subjective when customers see the unfairness of others' prices for similar products or compare perceptions of others' prices for similar products. An appropriate perceived price has a positive impact on customer satisfaction, customers are more interested in getting a reasonable perceived price, which means that the value is based on what customers want in transactions [6]. Based on the explanation above, the formulation of the hypothesis are as follows:

**Hypothesis 1: The perceived price affects perceived value.**

**Hypothesis 2: The perceived price affects satisfaction customers.**

**Delivery Quality.** [11] regarding how delivery affects satisfaction, it was found that: (1). Delivery choices directly impact key customer ratings, including repeat purchases and, (2). Retailers invest in delivery options and anticipate changing customer expectations where current delivery options will become the norm in the future.

Consumers also expect fast deliver, changes for orders, cancellations, product returns, and refunds [12]. Referring to [7] found that timely product delivery, product returns, and refunds are very important when consumers are dissatisfied. E-commerce consumer satisfaction largely depends on the timely delivery of reliable products and services. [13]. Delivery of

quality is increasingly recognized as an important factor influencing variable perceived value, satisfaction, and repurchase intentions [14]. Based on the reason above, the formulation of the hypothesis such as:

**Hypothesis 3: Delivery quality affects perceived value.**

**Hypothesis 4: Delivery quality affects the satisfaction of the customer.**

**Perceived Value.** The consumer's perception of value is a very useful framework in a variety of situations and provides a wide range of insights. This suggests that to understand how the company's offering resonates in the minds of consumers, the seller must assess the total customer value and total customer cost associated with each competitor's offering. The aggrieved seller has two alternatives, increasing the customer's overall profit or reducing the overall cost. The first requires strengthening or increasing the economic, functional, and psychological benefits of the product, service, staff, and image of the offer. The second requires reducing consumption costs, the way is to reduce prices or operation and maintenance costs, simplify the ordering and delivery process, or absorb part of the buyer's risk by offering guarantees. [9].

Referring to [15] it appears that the perceived value is not only linked to the perceived price, but also to the perceived quality of the product and the intention to repurchase. There is an ongoing debate as to whether or not value and satisfaction represent the same thing. Referring to previous research perceived of value also satisfaction can be measured as two distinct. [16].

**Hypothesis 5: The Perceived value affects satisfaction on the customer.**

**Hypothesis 6: The perceived value affects repurchase intention to customer**

**Satisfaction.** Customer satisfaction is the customer's perception of the performance of a product or service relative to their expectations. If the performance or experience is not as expected, the customer is dissatisfied. If it meets expectations, the customer is satisfied. expectations, then the customer is very satisfied or happy. High satisfaction leads to high customer loyalty, so companies need to ensure they meet and exceed customer expectations. [9]. Researchers have been proven that satisfaction is the most important variable factor in repeat purchases when shopping online. [17].

**Hypothesis7: Customer satisfaction affects repurchase intention**

**Repurchase Intention.** The process of purchasing individual goods or services from the same company on behalf of repurchase intent [1], and the reasons for repurchasing are based primarily on previous purchase experiences. Customers will develop a strong motivation to repeat purchase intent when they find value (both useful and hedonistic) and are satisfied with purchases before from the same vendor [2]. Competitive advantage in the marketplace must have customer retention to get profits.[18]. Online sellers need to be aware of consumers' repeat purchase intentions as they only need a few purchases from one customer to be profitable throughout the process. Customer lifecycle it also takes more time to work with new customers online than it does to keep them. Therefore, repeat purchases are essential for e-commerce success.

## Research Model

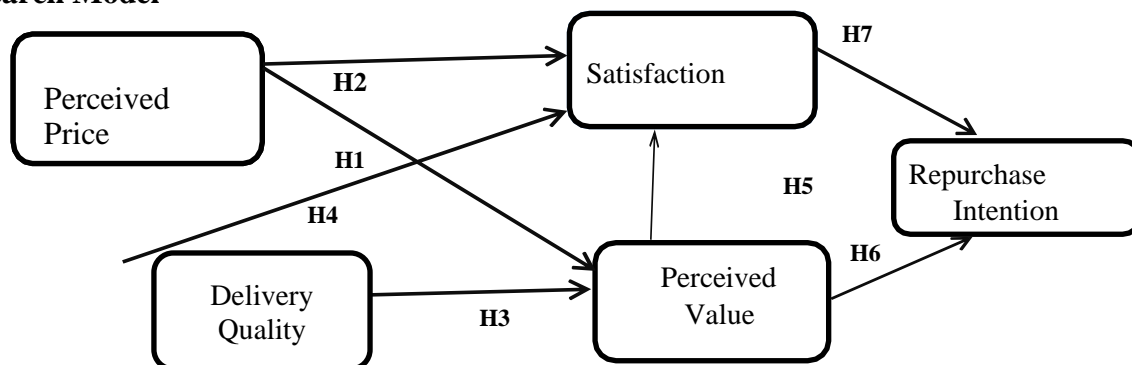


Figure 1. Research Model

## Methodology and Data Analysis

**Population and Research Sample.** The population of this study is all consumers who bought products online on e-commerce websites in Indonesia during the COVID19 pandemic.. The sample is part of the population revealed that research using regression analysis and SEM methods must have a minimum number of samples five times the number of questions in the questionnaire. So the total number of questionnaires in this study used 166 consumer respondents who shop online in e-commerce. The technique used to select and determine the sample is non-probability sampling. Non-probability sampling is a sampling technique that does not provide equal chance that every element or member of the population will be selected as a sample. The researcher used a purposive sampling technique with the following response criteria such as:

- Consumers with a minimum age of 17 years 34 years (based on a survey conducted by the Association of Internet Service Providers of Indonesia said the composition of most Internet users is 17-34 years old)
- Online shopping experience on online shopping sites e-commerce in Indonesia (purchase period is during the COVID19 pandemic)
- Have a device with an internet network to access the site (mobile/computer/laptop)

### Data Analysis Techniques.

In this study, the SEM method of partial least squares (PLS) was used. SEM PLS can also analyze reflective and formative measurement patterns as well as latent variables. PLS-SEM can work efficiently with small samples and complex models. Furthermore, the spread of data assumptions in PLS-SEM is relatively wider, and formative and reflective measurement models of latent variables can also be analyzed with an indicator without encountering identification problems[19]. Analysis stages when using SEM Partial Least Square. According to [20], suggesting several stages that are passed to evaluate the model structurally, the first by conducting a multicollinearity test, followed by analyzing the relationships in the model and estimating the predictive ability of the model. The first stage after testing validity and reliability is to ensure the degree of collinearity.

## Research Result and Discussion

**Pre-Test (Pre-Test).** At the beginning of this study, a pretest was conducted for 30 respondents. It can be seen that all research indicators (18 indicators) meet the validity test criteria, this is indicated by the factor load value which has a value of 0.5. After testing the validity, then testing the reliability of the constructs that will be used in the study. All instruments in this study are also reliable with a value of 0.4.

### PLS Test Results

In this main study, re-testing was carried out for the accuracy and consistency of data on 166 respondents who used e-commerce in their purchases. Next, test the hypothesis. In this test, further data processing uses the PLS analysis method for testing hypotheses 1 to 7.

**Partial Least Squares.** Testing the results of the study using partial least squares test hypotheses 1 to 7 using the WarpPLS 7.0 program. The results obtained by the general result can be seen in Table 1, the model has a good fit, where the P-value for the average path coefficient (APC) and the average R-squared (ARS) are  $P > 0.001$ , which means less than  $< 0.05$ . Also, the resulting average variance inflation factor (AVIF) is 1.648, which means  $< 5$ . This shows that there is no multicollinearity problem between independent (exogenous) variables. The number of iterations to get is six estimates.

**Table 1.** General SEM Analysis Result

Model fit and quality indices
Average path coefficient (APC)=0.339, $P < 0.001$
Average R-squared (ARS)=0.404, $P < 0.001$
Average adjusted R-squared (AARS)=0.392, $P < 0.001$
Average block VIF (AVIF)=1.648
Average full collinearity VIF (AFVIF)=1.893
Tenenhaus GoF (GoF)=0.422
Sympson's paradox ratio (SPR)=1.000
R-squared contribution ratio (RSCR)=1.000
Statistical suppression ratio (SSR)=1.000
Nonlinear bivariate causality direction ratio (NLBCDR)=1.000
Outer model analysis algorithm: PLS regression
Default inner model analysis algorithm: Warp3
Multiple inner model analysis algorithms used? No
Resampling method used in the analysis: Stable
Number of data resamples used: 100
Number of cases (rows) in model data: 100
Number of latent variables in the model: 5
Number of indicators used in the model: 18
Number of iterations to obtain estimates: 6

**Path Coefficient.**

The path coefficient and p-values show that price perception has a significant impact on value perception with a p-value < 0.001 and a path coefficient value of 0.326, price perception has a significant impact on satisfaction with a P-value <0.001 and path coefficient value of 0.251, significant impact of delivery quality on perceived value with P-value of 0.001 (<0.05) and path coefficient value of 0.57.

Delivery quality has no significant impact on satisfaction at a P-value of 0.15 (<0.05) and a path coefficient value of 0.081, the perceived value has a significant impact on satisfaction at a P-value of <0.001 and a path coefficient value of 0.521, the perceived value has a significant impact on repurchase intent with a P value <0.039 (<0.05) and a path coefficient value of 0.13. Satisfaction has a significant impact on repeat purchase intentions with a P-value < 0.001 and a path coefficients value of 0.673. The results of the WarpPLS 7.0 path coefficients are shown in the table below.

**Table 2.** Path Coefficient

	<i>Perceived Price</i>	<i>Delivery Quality</i>	<i>The Perceived Value</i>	<i>Satisfaction on customer</i>	<i>Repurchase Intention</i>
<i>Perceived Value</i>	0,326	0,567			
<i>Satisfaction</i>	0,251	0,081	0,521		
<i>Repurchase Intention</i>			0,13	0,673	

**Table 3.** P-value

	<i>The Perceived Price</i>	<i>Delivery Of Quality</i>	<i>Perceived of Value</i>	<i>Satisfaction Customers</i>	<i>Repurchase Intention to customer</i>
<i>Perceived Value</i>	<0.001	<0.001			
<i>Satisfaction</i>	<0.001	0.146	<0.001		
<i>Repurchase Intention</i>			0.039	<0.001	

### Hypothesis Test Result.

**Table 3.** hypothesis test results using Wrap Pls 7.0

	Hypothesis	P-Value	Description
H1	Perceived price affects perceived value	P<0.001	Data Supports H1
H2	Perceived price affects satisfaction customers.	P<0.001	Data Supports H2
H3	Delivery quality affects perceived value.	P<0.001	Data Supports H3
H4	Delivery quality affects satisfaction customer	P<.0.15	Data Not Support H4
H5	The perceived value affects the satisfaction of the customer.	P<0.001	Data Supports H5
H6	The perceived value affects repurchase intention	P<0.04	Data Supports H6
H7	Customer satisfaction affects repurchase intention	P<0.001	Data Supports H7

### Discussions

The data support hypotheses H1, H2, H3, H5, H6, and H7, while H4 with a p-value <0.15 (<0.05) does not support that delivery quality has no positive effect on satisfaction and a value coefficient of 0.08. This study shows that when delivery quality is mediated by perceived value, this affects satisfaction, it can be seen that there is a p-value <0.001. So in this study, the quality of delivery, if it exceeds the perceived value, quality of delivery will increase.

### Conclusion

Online shopping during the COVID-19 pandemic increased due to a ban on offline shopping which had an impact on e-commerce. Seen in this study shows that the factors that form repurchase intention are influenced by perceived value, perceived price, delivery quality, and satisfaction. It's just that the quality of delivery does not directly affect satisfaction. But if it is mediated by the perceived value variable, the quality of delivery affects satisfaction. This study means that the quality of delivery will increase if it passes through the perceived value to achieve consumer satisfaction shopping in e-commerce.

### Implication and suggestion future research

This research still has some limitations and barriers, so it needs to be improved for future research. Here are some suggestions that are possible for e-commerce companies or to be applied to further research, namely further research is expected to be carried out by adding questionnaire indicators to add questions and increase shopping samples in e-commerce. Practitioners who have online stores must also pay attention to the quality of existing deliveries so that later they can have a direct effect on consumer satisfaction when shopping online in e-commerce.

## References

- [1] T. R. S. & H. I. Ahn, "The Impact of the online and offline features on the user acceptance of Internet shopping malls," *Electronic Commerce Research and Applications*, vol. 3, no. 4, pp. 405-420, 2004.
- [2] A. a. B. J. Ali, "Understanding Customer Repurchase Intention in E-Commerce: Role of Perceived Price, Delivery Quality, and Perceived Value," *Jindal Journal of Business Research*, pp. 1-16, 2019.
- [3] S. Chich, "Empirical study about the effect of price on customer satisfaction concerning Dominos and Pizza HUT," *International Journal of Applied Services Marketing Perspectives*, vol. 1, no. 12, p. 18, 2012.
- [4] F. Consulting, "The road to cross channel maturity," In Forrester Consulting, Australia, 2014.
- [5] A. & U. W. Eggert, "Customer perceived value: A substitute for satisfaction in business markets," *Journal of Business & Industrial Marketing*, vol. 12, no. 2/3, pp. 107-118, 2002.
- [6] J. F. H. G. T. M. R. C. & S. M. Hair, *A primer on Partial least Squares Structural Equation Modelling*, 2013.
- [7] P. G. G. C. R. & R. J. Hellier, "Customer repurchase intention: A general structural equation model," *European Journal of Marketing*, vol. 37, no. 11/12, pp. 1762-1800, 2003.
- [8] B. J. J. & M. M. Hernandez, "Key website factors in e-business strategy," *International Journal of Information Management*, vol. 29, no. 5, pp. 362-371, 2009.
- [9] A. X. L. M. K. a. H. F. Herrmann, "The influence of price fairness on customer satisfaction: An empirical test in the context of automobile purchases," *Journal of Product and Brand Management*, vol. 16, no. 1, pp. 49-58, 2007.
- [10] P. K. Kevin Lane Keller, *Marketing Management 15 th*, Pearson, 2016.
- [11] M. & L. V. Khalifa, "Online consumer retention: Contingent effects of online shopping habit and online shopping experience," *European Journal of Information System*, vol. 16, no. 6, pp. 780-792, 2007.
- [12] H. W. X. Y. & G. S. Kim, "Which is more important in Internet Shopping, Perceived price or trust? Electronic Commerce Research and Applications," *Electronic Commerce Research and Applications*, vol. 11, no. 3, pp. 241-252, 2012.
- [13] H. Lin, "The impact of website quality dimensions on customer satisfaction in the B2C e-commerce context.," *Total Quality Management and Business Excellence*, vol. 5, no. 363-378, p. 22, 2007.
- [14] L. A. R. & D. P. Molinari, "Satisfaction, quality, and value and effects on the repurchase and positive word of mouth behavioral intentions in a B2B services context," *Journal of Services Marketing*, vol. 22, no. 5, pp. 363-373, 2008.
- [15] T. & H. J. Nagle, "The strategy and tactics of pricing: A guide to growing more profitably," 2006.
- [16] C. & K. Y. Park, "Identifying key factors affecting consumer purchase behavior in an online shopping context," *International Journal of Retail & Distribution Management*,



2003.

- [17] M. & R. D. Sholihin, Analisis SEM-PLS dengan WrapPLS 3.0 untuk hubungan nonlinier dalam penelitian sosial dan bisnis, Yogyakarta: Andi, 2013.
- [18] H. & H. H. Tsai, "Determinants of e-repurchase intentions: An integrative model of quadruple retention drivers," *Information & Management*, vol. 44, no. 3, pp. 231-239, 2007.
- [19] V. Zeithaml, "Service excellence in electronic channels.," *An International Journal*, vol. 12, no. 3, pp. 135-139, 2002.
- [20] V. A. Zeithaml, "Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence.," *Journal of Marketing*, vol. 52, no. 3, p. 2, 1988.